

REMARKS

In the non-final Office Action dated August 23, 2010, the following rejections are presented: claims 7-10 stand rejected under U.S.C. § 112(2); claims 1 and 6 stand rejected under U.S.C. § 103(a) over AAPA and Feuerstraeter (U.S. Patent Pub. 2003/0058894); claims 2-3 stand rejected under U.S.C. § 103(a) over AAPA and the '894 reference further in view of Bongiorno (U.S. Patent No. 6,292,045); claims 4-5 stand rejected under U.S.C. § 103(a) over AAPA and the '894 reference further in view of Werle (U.S. Patent No. 5,778,002); and claims 7-10 stand rejected under U.S.C. § 103(a) over Pohlmeier (U.S. Patent No. 6,959,014), Jeter (U.S. Patent No. 4,951,776) and the '894 reference. Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action.

Applicant respectfully traverses the § 103(a) rejections of claims 1-6 for lack of proper motivation to combine the '894 reference with the AAPA. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." (*In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) and cited with approval in *KSR*). The Office Action asserts one would be motivated to combine the '894 reference with the AAPA because the '894 reference teaches that detecting a data transfer rate allows for communication between one or more devices that would otherwise not be able to communicate "without using additional hardware." However, the asserted motivation is erroneous on two points. First, the asserted portion of the '894 reference does not teach communication between the two devices "without additional hardware" but rather that a "solution is needed that automatically configures one or more devices residing in separate communication networks to communicate with each other when otherwise the devices would not." Paragraph 0011 of the '894 reference. There is not mention of removing and/or not using additional hardware. Second, AAPA already provides a workable solution for the LIN-protocol environment (*e.g.*, as used in the automotive industry). This solution already accounts for the different data rates of the LIN protocol, although it requires specially designed microcontrollers and associated external circuits, as discussed in Applicant's specification. Thus, adding the SERDES chipset of the '894 reference, somehow modified for LIN-protocol, would result in a solution that is not noticeably different from AAPA,

which already provides a multi-chip solution requiring specially adapted chips and microcontrollers and does not correspond to the claim limitations.

Moreover, Applicant respectfully submits that the skilled artisan would not find it obvious to redesign the '894 reference's chipset for a LIN-protocol when the reference suggests no clear advantage resulting therefrom. Further, the assertions of obviousness to combine in an integrated circuit on a single base chip are not properly supported by the *In re Larson* case cited by the Office Action. Such a vague assertion of obviousness amounts to an assertion that it is always obvious to combine disparate elements into an integral component. This assertion is unsupported by the M.P.E.P. and relevant case law. *See, e.g., Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983) (finding it unobvious to make integral multiple pieces of previous machines because doing so showed insights that were "contrary to the understandings and expectations of the art."). For instance, none of the cited references suggests a LIN-protocol solution with the recited elements arranged in a single integrated circuit. In addition, the '894 reference appears to teach away from such integration through the use of a frequency configuration unit and a frequency selector unit in each of the chips of the chipset disclosed by the '894 reference. Applicant submits that the only evidence of record that suggests the claim limitations as a whole is found in Applicant's specification. Accordingly, Applicant submits that the rejection is improper and requests that it be withdrawn.

Applicant respectfully traverses the § 103(a) rejection of claims 7-10 because the '014 reference, alone or in combination with the '776 reference or the '894 reference, lacks correspondence to certain aspects of the claimed invention. The asserted hypothetical embodiment lacks correspondence to certain aspects of the claimed invention including, *e.g.*, converting analog signals to digital signals in response to a detected bit rate and providing a reset signal in response to monitor the vehicle battery voltage. The portion of the '014 reference asserted for converting from analog to digital in response to a detected bit rate does not appear to mention the detection of a bit rate, or the use of that detection in a conversion. Further, instead of converting a signal from analog to digital, it appears that the '014 reference converts a digital signal at one signal level to another digital signal at a different signal level. In addition the '776 reference does not appear to teach a reset in response to monitoring the vehicle battery voltage, but rather in response to the start of the vehicle. The battery voltage is not engaged prior to start of the vehicle and the actual voltage of the battery does not change when the vehicle is turned on.

Further, there is no indication that the voltage battery level is monitored. For at least these reasons the asserted hypothetical embodiment lacks correspondence and the § 103(a) rejection should be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 7-10 because one of skill in the art would not combine the teachings of the '014 reference, the '776 reference and/or the '894 reference into a single embodiment. The inappropriateness of the proposed combination is evidenced, in part, by the Office Action's assertions of different fields of endeavor when attempting to assert that the references deal with the same field of endeavor ("vehicle data communications" and "automatic data rate detection techniques"). The '014 reference is directed to operating a communication bus using a LIN protocol. The '776 reference, on the other hand, is directed to a vehicle anti-theft system. The fact that the anti-theft system and the LIN protocol are both located in a vehicle does not mean one of skill in the art would look to teachings of an anti-theft system to solve a problem in a communication bus. The disparity in the teachings of the two references is particularly apparent in the Office Action's erroneous assertion of correspondence to a reset signal. The '776 reference discloses that the reset signal is applied in response to turning on the ignition key. *See, e.g.*, Col. 4:59-62 and Col. 6:1-5. There is no indication in the '014 reference of a link between the use of the LIN protocol and the use of the appropriate ignition key. The current response amounts to a suggestion that one would look through all fields of endeavor to solve a problem not evidenced in the primary reference.

Applicant further traverses the § 103 rejection of claims 7-10 because the cited references teach away from the Office Action's proposed combination. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (U.S. 2007). ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."). Applicant submits that the combination would render the invention inoperable because the '014 reference specifically discloses shifting the range of voltage logic levels to V_{batt}. Including a voltage regulator that provided a V_{cc} would render the device inoperable because the idle state of the communications bus is defined as V_{batt}. Under M.P.E.P. § 2143.01, the rejections cannot be maintained.

Moreover, the Office Action fails to provide a proper reason for the asserted combination of references. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (*In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) and cited with approval in *KSR*). The Office Action has provided no support for the assertion that the regulated voltage, monitoring of vehicle battery voltage, and reset signal asserted from the ‘776 reference are related to assuring proper voltage levels within an integrated circuit implementing a LIN protocol. The ‘776 reference, along with any disclosed regulation of voltage and reset signal are all directed towards the goal of implementing an anti-theft device that operates by locking the brakes until a data card has been read that allows for the brakes of the vehicle to be unlocked. The reset of the ‘776 reference, for example, places the microprocessor in the condition to initiate the unlocking of the brakes. Applicant fails to understand how such a reset signal is applicable to a LIN protocol. For at least these reasons the § 103(a) rejection of claims 7-10 is improper and should be withdrawn.

Applicant respectfully traverses the § 112(2) rejection of claims 7-10 as improper. According to M.P.E.P. § 2173.05(e), “the failure to provide explicit antecedent basis for terms does not always render a claim indefinite. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite. *Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992).” One of skill in the art would have understood the scope of the claim, and therefore the asserted improper antecedent basis rises, at best, to the level of an objection. Notwithstanding, and in an attempt to facilitate prosecution, Applicant has amended claim 7. Applicant therefore requests the § 112(2) rejection be removed.

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In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Juergen Krause-Polstorff, of NXP Corporation at (408) 474-9062 or the undersigned.

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